CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/Cube/2017-18 10.06.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of the work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	:	RCC Drain Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28th day
Sample Received on	:	10.06.2017

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	13.05.2017	10.06.2017	8.125	475.5	21.13
2	13.05.2017	10.06.2017	8.290	493.5	21.93
3	13.05.2017	10.06.2017	8.389	506.3	22.50

*Information is furnished by the Customer/Representative.

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****

VIDYARANI P.K.
Technical Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ಬಾಪೂಜಿ [illegible]
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು

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T-2377

Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/Cube/2017-18 12.06.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of the work	:	Construction of RCC drain at Muthumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	:	RCC Drain Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	12.06.2017

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Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	15.05.2017	12.06.2017	8.129	506.3	22.50
2	15.05.2017	12.06.2017	8.292	516.3	22.95
3	15.05.2017	12.06.2017	8.328	525.4	23.35

*Information is furnished by the Customer/Representative.

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VIDYARANI P.K.
Technical Manager

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ್
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ಬಾಸವೇಶ್ವರ ನಗರ
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T-2377

Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/Cube/2017-18 12.06.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	: **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	: **Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of the work	: Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	: EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	: RCC Drain Concrete
Technical Reference	: IS: 516-1959 (RA-2013)
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day
Sample Received on	: 12.06.2017

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	15.05.2017	12.06.2017	8.190	475.5	21.13
2	15.05.2017	12.06.2017	8.290	493.2	21.92
3	15.05.2017	12.06.2017	8.365	506.8	22.52

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AE-IV

VIDYARANI P.K.
Technical Manager

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Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/Cube/2017-18 15.06.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of the work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	:	RCC Drain Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	15.06.2017

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Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	18.05.2017	15.06.2017	8.299	480.2	21.34
2	18.05.2017	15.06.2017	8.329	490.3	21.79
3	18.05.2017	15.06.2017	8.412	505.4	22.46

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AE-12

VIDYARANI P.K.
Technical Manager

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TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of the work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID*	:	RCC Drain Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	15.06.2017

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	18.05.2017	15.06.2017	8.155	478.3	21.26
2	18.05.2017	15.06.2017	8.263	493.5	21.93
3	18.05.2017	15.06.2017	8.380	506.5	22.51

*Information is furnished by the Customer/Representative.

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Technical Manager

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ಪಿ.ಎಂ. ರಸ್ತೆ, ಕೆಂಪೇಗೌಡನಗರ, ಬೆಂಗಳೂರು

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T-2377

Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/Cube/2017-18 20.06.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of the work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	:	Culvert Side Wall Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	20.06.2017

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	23.05.2017	20.06.2017	8.123	485.5	21.58
2	23.05.2017	20.06.2017	8.295	496.6	22.07
3	23.05.2017	20.06.2017	8.382	512.3	22.77

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AE-12

VIDYARANI P.K.
Technical Manager

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T-2377

Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/Cube/2017-18 26.06.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of the work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	:	Culvert Deck Slab Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	26.06.2017

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	29.05.2017	26.06.2017	8.129	475.5	21.13
2	29.05.2017	26.06.2017	8.299	493.2	21.92
3	29.05.2017	26.06.2017	8.350	506.5	22.51

*Information is furnished by the Customer/Representative.

Note: M-12

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Technical Manager

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Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/Cube/2017-18 10.06.2017

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* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of the work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	:	RCC Drain Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	10.06.2017

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Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	13.05.2017	10.06.2017	8.155	512.2	22.76
2	13.05.2017	10.06.2017	8.290	528.6	23.49
3	13.05.2017	10.06.2017	8.350	539.8	23.99

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ಎಸ್.ಎಂ. ರಸ್ತೆ. ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು

MOYARAN P.K.
Technical Manager

Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/Precast slab/2017-18 07.06.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CORE

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	:	Precast slab
* Grade of Concrete	:	M_{20}
Techinical Reference	:	IS:516-1959 (RA- 2013), SP-24:1983.
Sample Received on	:	02.06.2017
Date of Testing	:	07.06.2017

Sl. No	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	50.00	84.00	0.414	2510.10	1.68	0.965	29.50	15.02	16.23	16.81	21.01
2	50.00	83.00	0.408	2503.53	1.66	0.963	32.60	16.60	17.93	17.27	21.59
3	50.00	81.00	0.400	2515.04	1.62	0.959	33.90	17.27	18.65	17.88	22.35

* Information is furnished by the Customer/Representative

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VIDYADHAR P.K.
Technical Manager

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T-2377

Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/CEMENT/2017-18 Date: 06.05.2017

TEST REPORT ON CEMENT

* Customer	:	**Asst. Executive Engineer**, Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of Work	:	Construction of RCC drain at Halumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	:	Cement – Sample 2
Sample Received on	:	04.05.2017
Period of Testing	:	04.05.2017 to 08.05.2017

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4) 1988 (RA-2014)	30.00 %	-
2	a) Initial Setting Time	IS-4031 (Part -5) 1988 (RA-2014)	180 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5) 1988 (RA-2014)	475 Minutes	Not More than 600 Minutes
3	Soundness by Le Chartlier Method	IS-4031 (Part-3) 1988 (RA-2014)	1 mm	Not more than 10mm

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Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/SAND-Gradation/2017-18 08.05.2017

TEST REPORT ON SIEVE ANALYSIS OF FINE AGGREGATES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of Work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	:	Fine Aggregates - Sample 2
Technical Reference	:	IS : 2386 (Part 1) - 1963 (RA-2011)
Sample Received On	:	04.05.2017
Date of Testing	:	08.05.2017

Total Wt. of Aggregates in gms = **1000**

IS Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2011)			
		Zone-I	Zone-II	Zone-III	Zone-IV
10	100	100	100	100	100
4.75	97.00	90-100	90-100	90-100	95-100
2.36	77.00	60-95	75-100	85-100	95-100
1.18	54.00	30-70	55-90	75-100	90-100
600 Micron	25.00	15-34	35-59	60-79	80-100
300 Micron	15.00	5-20	8-30	12-40	15-50
150 Micron	6.50	0-10	0-10	0-10	0-15

* Information is furnished by the Customer/Representative

Remarks : This sample is under Zone-I specific limits.

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T-2377

Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/AGG/GR/2017-18 08.05.2017

TEST REPORT ON SIEVE ANALYSIS OF COARSE AGGREGATES

* Customer	: **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	: **Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of Work	: Construction of RCC drain at Holumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	: EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	: Coarse Aggregates (40mm) - Sample 2
Technical Reference	: IS : 2386 (Part 1) -1963 (RA-2011)
Sample Received on	: 04.05.2017
Date of Testing	: 08.05.2017

Total Wt. of Aggregates in gms= **5000**

IS Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2011)	
		Graded	Single Sized
80	100	100	-
63	100	-	100
40	96.00	95-100	85-100
20	36.00	30-70	0-20
10	17.00	10-35	0-5
4.75	3.30	0-5	-

* Information is furnished by the Customer/Representative

Remarks : This sample is under graded specific limits.

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Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/AGG/GR/2017-18 08.05.2017

TEST REPORT ON SIEVE ANALYSIS OF COARSE AGGREGATES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of Work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	:	Coarse Aggregates (20mm) – Sample 2
Technical Reference	:	IS : 2386 (Part 1) -1963(RA-2011)
Sample Received on	:	04.05.2017
Date of Testing	:	08.05.2017

Total Wt. of Aggregates in gms= **5000**

IS Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS :383-1970 (RA- 2011)	
		Graded	Single Sized
40	100	100	100
20	96.94	95-100	85-100
10	31.94	25-55	0-20
4.75	4.82	0-10	0-5

* Information is furnished by the Customer/Representative

Remarks : This sample is under Graded specific limits

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Job No.: CTCE/BBMP/W.No.12/BS/Steel/2017-18 08.05.2017

TEST REPORT ON REINFORCEMENT STEEL

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Samples ID	:	8mm Bar
Technical Reference	:	IS: 1786-2008 (RA-2013)
Date of Testing	:	08.05.2017

CIVIL ENGINEERING TESTING LABORATORY www.civiltechconsultants.com

Sl No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm2	Tensile strength (Ultimate stress) N/mm2	Elongation percent gauge length		
1	8	0.39	518	559	13.15	O.K	O.K

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AE-12

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ಬಾಸವೇಶ್ವರ ನಗರ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಪಿ.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು

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Basaveshwaranagar, Bangalore-560 079.

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Job No.: CTCE/BBMP/W.No.12/BS/Steel/2017-18

08.05.2017

TEST REPORT ON REINFORCEMENT STEEL

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
		Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Samples ID	:	10 mm Bar
Technical Reference	:	IS: 1786-2008 (RA-2013)
Date of Testing	:	08.05.2017

CIVIL ENGINEERING TESTING LABORATORY www.civiltechconsultants.com

Sl No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm2	Tensile strength (Ultimate stress) N/mm2	Elongation percent gauge length		
1	10	0.62	526	568	13.3	O.K	O.K

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Job No.: CTCE/BBMP/W.No.12/BS/Steel/2017-18 08.05.2017

TEST REPORT ON REINFORCEMENT STEEL

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Samples ID	:	16 mm Bar
Technical Reference	:	IS: 1786-2008 (RA-2013)
Date of Testing	:	08.05.2017

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Sl No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm2	Tensile strength (Ultimate stress) N/mm2	Elongation percent gauge length		
1	16	1.58	530	572	13.45	O.K	O.K

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Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/Cube/2017-18 08.06.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of the work	:	Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID*	:	RCC Drain Concrete
Technical Reference	:	IS: 516-1959 (RA-2013)
Size of cubes	:	150mmx150mmx150mm
Cross Sectional Area	:	22500 mm^2
* Grade of Concrete	:	M_{20}
Compressive Strength as on	:	28^{th} day
Sample Received on	:	08.06.2017

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	11.05.2017	08.06.2017	8.192	493.5	21.93
2	11.05.2017	08.06.2017	8.290	506.2	22.50
3	11.05.2017	08.06.2017	8.328	512.4	22.77

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Job No.: CTCE/BBMP/W.No.12/BS/CSR-05/327g/Cube/2017-18 08.06.2017

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

* Customer	: **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	: **Mr. R. Shivarama,** No.4/13, 1st Cross, Avalamma Choutry, Magadi Road, Bangalore – 560 023.
* Name of the work	: Construction of RCC drain at Hulumuniyappa Layout in Ward No.12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	: EE/DD/WO/64/2017-18 Dated: 04.05.2017
* Sample ID	: RCC Drain Concrete
Technical Reference	: IS: 516-1959 (RA-2013)
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
* Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day
Sample Received on	: 08.06.2017

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	11.05.2017	08.06.2017	8.135	502.2	22.32
2	11.05.2017	08.06.2017	8.229	512.3	22.77
3	11.05.2017	08.06.2017	8.358	529.7	23.54

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AE-12

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